

Whitebait: what are they, where do they come from and where are they going?



Westport, August 1968





Whitebait: five species of Galaxiid

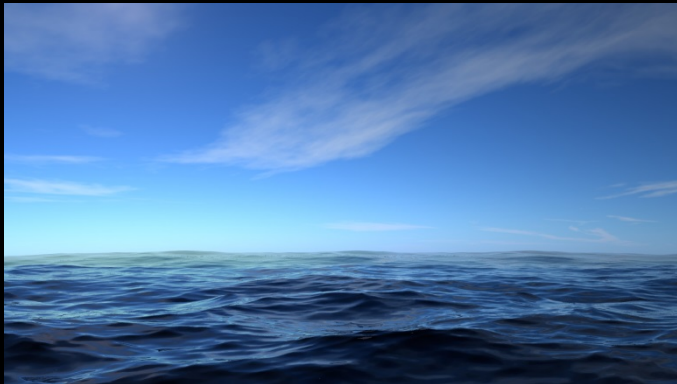


Whitebait species are diadromous



Adults – freshwater

Spawning – riparian zone



Larvae - marine

Whitebait catch composition

- Inanga (~85%)
- Koaro (~10%)
- Banded kokopu (~3%)
- Giant kokopu (~1%)
- Shortjawed kokopu (~1%)



Inanga



Koaro



Banded kokopu



- Conservation status: Not threatened
- Adults common on Banks Peninsula

Giant kokopu



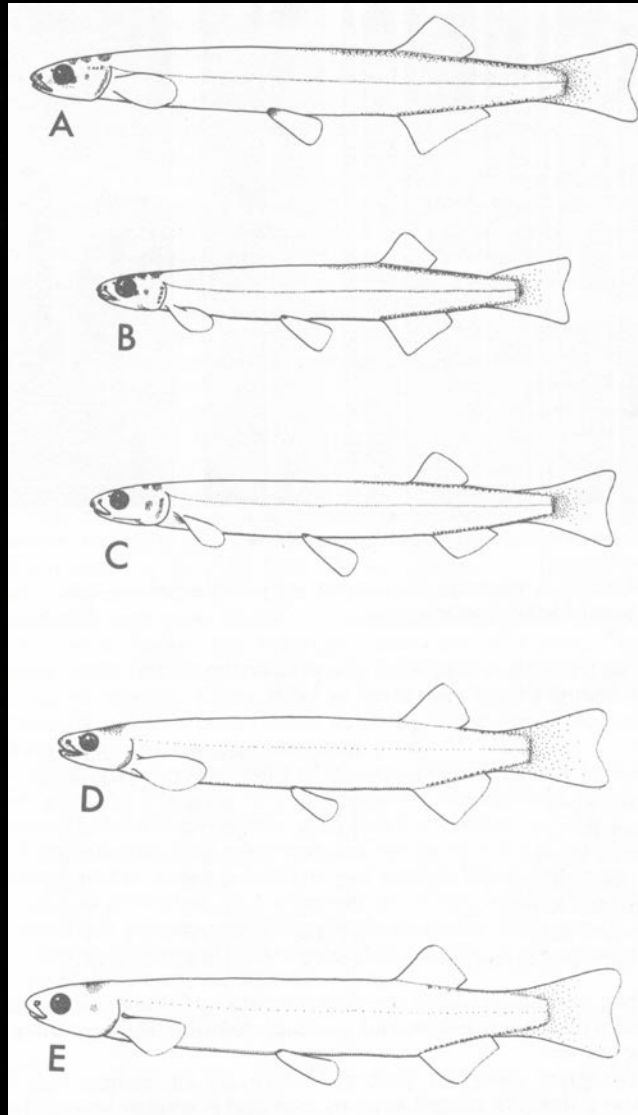
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Short-jawed kokopu



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Identifying whitebait species



A Inanga

Small mouth with lower and upper jaws even, dorsal fin directly above anal fin, large black spots ahead of dorsal fin sometimes right forward and along the sides, translucent, blue-green when fresh; glassy clear 50-65mm.

B Banded kokopu

Lower jaw a little shorter than the upper jaw, mouth reaching to about the anterior eye margin, dorsal fin directly above anal fin and prominent pectoral fins, very small pigments in front of dorsal fin and along the lateral line pale amber when fresh 30-45mm.

C Koaro

Shorter lower jaw, anal fin starts below the middle of dorsal fin; large prominent pectoral fins, very small pigments in front of dorsal fin and along the lateral line, sometimes opaque milky white when fresh 45-55mm

D Giant kokopu

Large mouth extending below the eye, dorsal fin not directly above anal fin, very small pigments in front of dorsal fin and along the lateral line, golden 45-50mm.

E Short-jawed kokopu

Much shorter lower jaw, dorsal fin not directly above anal fin, very small pigments in front of dorsal fin and along the lateral line, little coloration 50-55mm.

Threats to whitebait fishery

Destruction of
adult habitat



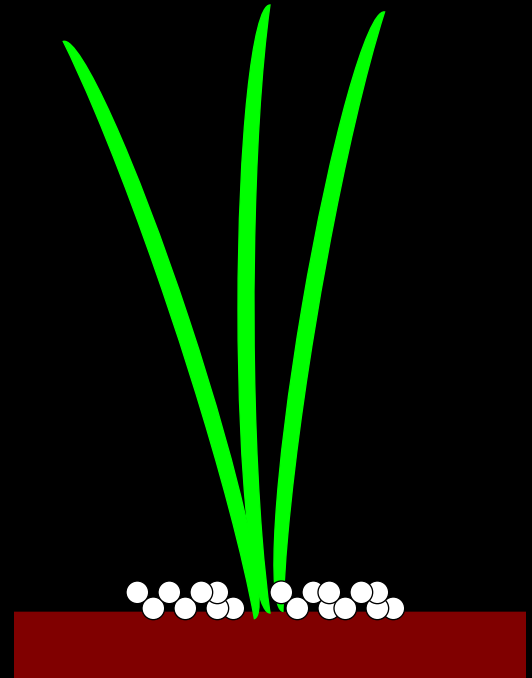
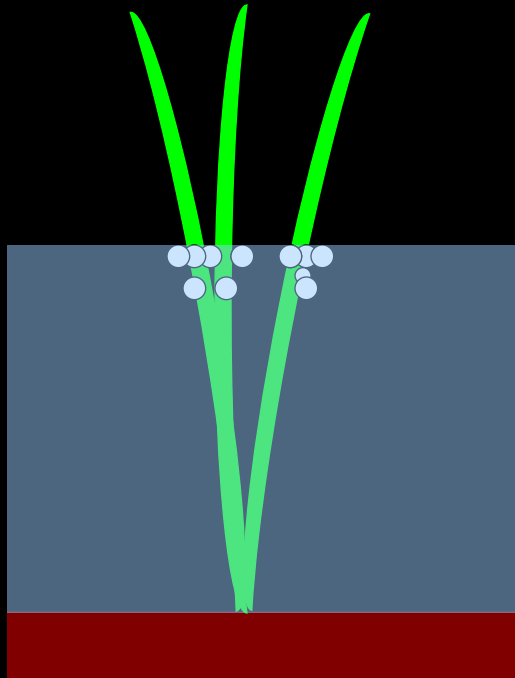
Destruction of
spawning habitat



'Modern' spawning habitat



Egg laying



Riparian vegetation



Dense vegetation & roots



Inanga eggs



Inanga eggs



Inanga eggs




Threats to whitebait fishery

Overfishing



Whitebait are the survivors



Life stage	Mortality rate
Eggs	30%
Larvae	99.99999%
Whitebaiting	
Adult	80%

The future..



Acknowledgements



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